

This listing of the claims replaces all prior versions in the application.

**Listing of Claims:**

1. (Original) A method of cardiac diagnostics of a patient, comprising:  
administering a stress test to the patient;  
acquiring a plurality of MRI cine-loops of the heart of the patient at a plurality of heart rates;  
adjusting the plurality of MRI cine loops based on a heart rate associated with respective ones of the MRI cines so as to compensate for differences in heart rate; and  
evaluating the compensated MRI cine loops so as to assess a state of coronary physiology of the patient.
2. (Original) The method of Claim 1, further comprising adjusting the administration of the stress test based on the evaluated compensated MRI cine loops.
3. (Original) The method of Claim 1, wherein the evaluation of the compensated MRI cine loops comprises determining a presence or absence of coronary artery disease based on the compensated MRI cine loops.
4. (Original) The method of Claim 1, further comprising simultaneously displaying a plurality of the compensated MRI cine loops.
5. (Original) The method of Claim 4, wherein at least one of the plurality of compensated MRI cine loops comprises a resting heart rate cine loop.
6. (Original) The method of Claim 4, wherein evaluation of the compensated MRI cine loops comprises determining a presence or absence of coronary artery disease based on the simultaneously displayed plurality of compensated MRI cine loops

7. (Original) The method of Claim 4, wherein simultaneously displaying a plurality of the compensated MRI cine loops comprises simultaneously displaying a plurality of cine loops for differing locations associated with the heart of the patient for a single dosage of a stress inducing agent.

8. (Original) The method of Claim 4, wherein simultaneously displaying a plurality of the compensated MRI cine loops comprises simultaneously displaying a plurality of cine loops for a single location associated with the heart of the patient for levels of stress of the patient.

9. (Currently Amended) The method of Claim 1, wherein adjusting the plurality of MRI cine loops comprises adding frames to ~~and/or removing frames from~~ at least one of the plurality of MRI cine loops.

10. (Currently Amended) The method of Claim ~~[[9]]~~ 1, wherein the adjusting comprises adding and/or removing frames ~~wherein frames are added to and/or removed from~~ respective ones of the MRI cine loops such that all of the MRI cine loops have a same number of frames.

11. (Currently Amended) The method of Claim 10, wherein the adding and/or removing frames comprises adding frames by repeating frames of an MRI cine loop.

12. (Currently Amended) The method of Claim 10, wherein the frames that are added and/or removed are evenly distributed throughout an MRI cine loop.

13. (Original) The method of Claim 1, wherein the MRI cine loops are compensated such that corresponding frames in each of the plurality of MRI cine loops correspond to a common relative time within a cardiac cycle of the patient.

14. (Original) The method of Claim 1, wherein the MRI cine loops are compensated so that differing heart rates of the patient visually appear to have a same duration.

15. (Original) The method of Claim 1, wherein adjusting the plurality of MRI cine loops comprises adjusting a duration of display of frames of a least one of the plurality of MRI cine loops such that each of the MRI cine loops has a common total duration.

16. (Original) The method of Claim 15, wherein each of the MRI cine loops has a duration of at least one full cardiac cycle.

17. (Original) The method of Claim 15, wherein frames for which the duration is adjusted are evenly distributed throughout the MRI cine loop.

18. (Original) The method of Claim 1, wherein evaluation the compensated MRI cine loops comprise comparing at least two of the plurality of cine loops to each other.

19. (Original) The method of Claim 18, wherein one of the at least two of the plurality of cine loops is a baseline MRI cine loop.

20. (Currently Amended) The method of Claim [[18]] 19, further comprising registering frames of the plurality of MRI cine loops to the baseline MRI cine loop.

21. (Original) A method of displaying MRI cine loops comprising:  
adjusting a characteristic of one frame of a plurality of frames of an MRI cine loop;  
and  
propagating the adjustment of the one frame to other frames of the MRI cine loop.

22. (Currently Amended) The method of Claim 21, further comprising:  
displaying a plurality of [[other]] MRI cine loops during the adjusting step; and

automatically propagating the adjustment of the one frame of the MRI cine loop to frames of the other MRI cine loops.

23. (Original) The method of Claim 21, wherein adjusting a characteristic comprises cropping a frame of the plurality of frames to provide a portion of the frame.

24. (Original) The method of Claim 21, wherein adjusting a characteristic comprises adjusting a display level of the frame.

25. (New) A method according to Claim 1, further comprising obtaining MRI images for the MRI cine loops using a fast gradient echo segmented k-space sequence having sufficient temporal resolution for identification of end of systole, the temporal resolution being between about 13-65 ms, with lower times corresponding to faster heart beats and higher times corresponding to slower heartbeats.

26. (New) The method of Claim 21, further comprising adding frames to at least one of the plurality of MRI cine loops with the added frames substantially evenly distributed through the at least one cine loop so that the cine loops represent different heart beats that are synchronized.

27. (New) The method of Claim 21, further comprising electronically storing the adjusted characteristic and subsequently displaying the MRI cine loops with the adjusted characteristic at a later time.